

Can There Be Growth with Equity?

An Initial Assessment of Land Reform in South Africa

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Julian May

South African experience with efforts to implement land reform thus far indicates that to realize the potential and help solve the problems rural areas face, the government's land reform program needs to get beneficiaries, non-governmental organizations, and the private sector more involved. Land reform should empower the poor, improve productivity, and create sustainable rural livelihoods, not just redistribute hectares of land.



Summary findings

Deininger and May use evidence from a survey of about 1,200 beneficiaries of South African land reform to assess the performance of the initial phase of the land reform program.

They find that the program has not lived up to the quantitative goals set, but did successfully target the poor. It has led to a significant number of economically successful projects that already generate sustainable revenues. These projects have involved significantly larger shares of poor people than less viable projects, suggesting that increased access to productive assets could be an important path to poverty reduction.

Given the need to develop a diverse and less subsidy-dependent strategy for poverty reduction, suitably adapted land reform could play an important part in restructuring South Africa's rural sector.

Much of this potential has yet to be realized. The authors' analysis points toward clear lessons about program design:

- Increase beneficiary awareness and participation. Shift from a centralized, bureaucratic structure designed for land distribution toward seeing program components as part of an integrated vision of rural development. This would strengthen links to other parts of land reform (including tenure reform), make better use of local synergies (including infrastructure such as housing), and encourage rather than stifle local initiative and decentralized implementation mechanisms.
- Integrate land redistribution into a land policy framework that strengthens existing property rights, especially tenure security for residents of communal areas.
- Ensure transparency, accountability, and the participation of the private sector. These are essential for dispelling fears that land reform is just another means of political favoritism rather than an instrument to transform the rural sector, as is indeed supported by international evidence.

This paper—a product of Rural Development, Development Research Group—is part of a larger effort in the group to evaluate innovative land policy initiatives. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria Fernandez, room MC3-508, telephone 202-473-3766, fax 202-522-1151, email address mfernandez2@worldbank.org. Policy Research Working Papers are also posted on the Web at www.worldbank.org/research/workingpapers. Klaus Deininger may be contacted at kdeininger@worldbank.org. September 2000. (26 pages)

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Abstract: We use evidence from a survey of about 1,200 South African land reform beneficiaries to assess performance of the initial phase of South Africa's land reform program. We find that even though the program has not lived up to the quantitative goals set, it was targeted to the poor and has led to the establishment to a significant number of projects that generate sustainable revenues. The lessons from these projects is that greater beneficiary participation and involvement of NGOs and the private sector are likely to be key to establishing a program that can make a substantive contribution to solving the problems confronting rural South Africa.

1 Introduction

Whether redistribution and the associated focus on distributional equity may be consistent with, or even conducive to, a growth-oriented strategy has been one of the key concerns of development economics. Traditionally, there was broad consensus that growth would be helped by and/or associated with increasing inequality; a notion often associated with the famous hypothesis by Kuznets (1955). This was contested by scholars emphasizing the importance of "growth with equity" and redistribution as a basis for subsequent growth (Adelman 1995). More recently, theoretical arguments that link aggregate growth to inequality have led to renewed interest in this debate, generally supporting the notion of a systematic link between inequality in the distribution of assets and economic growth. There is now broad stream of literature now suggests that redistributive efforts by government could, through increased investment by the poor, actually lead to higher growth (Aghion et al. 1999, Bardhan et al. 1999 and references cited therein), contrary to some earlier models which maintained that redistribution would reduce growth (Persson and Tabellini 1994).

Empirical support for these hypotheses, in the form of demonstrating the importance of initial conditions on subsequent economic performance, is available both at the household and the cross-country level. For individuals, it has been shown that initial wealth and associated borrowing constraints affect households' ability to make productive investments, acquire human capital, and start up enterprises (Blanchflower and Oswald 1998), resulting in possibly different trajectories of development (Piketty 1999), and affecting

broader socio-economic phenomena such as social cohesion and crime (Fajnzylber et al. 1998). In developing countries, credit constraints may prevent poor households from making profitable but indivisible investments – such as sending talented children to school. This may give rise to “poverty traps”, i.e. situations where poverty is perpetuated only because households lack the endowments needed to overcome market imperfections that would allow them to make otherwise profitable investments (Fafchamps and Pender 1997; Jalan and Ravallion 1999). At the cross-country level, even though the relationship between *income* inequality and growth is ambiguous (Banerjee and Duflo 1999), the distribution of *assets* seems to be strongly associated with subsequent growth performance (Birdsall and Londono 1998; Deininger and Squire 1998; Deininger and Olinto, 2000).

In this paper, we examine actual implementation of a program of redistributive reform using as an example the case of land reform in South Africa. This is of interest for a number of reasons. First, in South Africa, post apartheid governments have moved with determination to implement redistributive programs to overcome the legacy of discriminatory policies and practices they inherited. Land reform is one out of three major redistributive policies that are backed by a broad consensus on the need for redistributive programs to redress inequities in access to resources and economic opportunities. Second, ever since its conception, the South African land reform program has been accompanied by a debate on whether the goal of poverty reduction can be combined with a focus on improving productive efficiency (e.g. van Zyl et al. 1996; Levin and Weiner 1997; Lipton, Ellis, and Lipton 1996). This discussion is far from over (see Cousins, 2000) but thus far, most of the evidence on the extent to which land reform has accomplished its goal remains anecdotal. Finally, South Africa chose to follow a decentralized model of “negotiated” land reform whereby poor people receive a grant to enable them to acquire land. As this model is currently being debated or implemented in a number of other countries including Brazil, Colombia, Guatemala, Honduras, the Philippines, and Zimbabwe, evidence on emerging experience is of broader interest.²

We use data from a recent survey of land reform beneficiaries to examine to what extent the South African land reform program has been successful in combining equity and efficiency. To do so, we examine evidence on the targeting and productive impact of the land reform program, the degree to which the program lived up to expectations, and the scope to improve performance through modifications in program design. Section two presents a general description of rural poverty and the agricultural structure

² For Brazil see Buainain et al. 1999, Navarro 1998 and the documents at <http://www.dataterra.org.br> and <http://www.nead.gov.br>; for Colombia Machado and Suarez 1999, for Guatemala see the Peace Accords (Government of Guatemala 1996), for Honduras see Korczowski, 1999; for the Philippines see Hayami et al. 1990 and Deininger et al. 1999, for Zimbabwe see Moyo 1998 and Government of Zimbabwe 1998. The underlying concept of providing a grant for poor people to acquire land has also been applied in India (Agarwal, 1998).

in South Africa. Section three discusses the Reconstruction and Development Program (RDP) and key decisions regarding its design. Section four examines the degree to which land reform was targeted towards the poor, whether there is a conflict between the goals of equity and economic viability, and the characteristics of economically successful projects. Section five concludes by drawing out main implications.

2 Background

Based on a history of dispossession of its black population, South Africa's rural sector is characterized by a highly bi-modal distribution of livelihood opportunities and a dependence of the rural economy on migrant remittances and government handouts. Development of the productive potential of the rural sector appears to be a critical pre-condition for sustainable poverty reduction. To create the environment for such a revival and restructuring of rural areas, the new government implemented, from 1994, a far-reaching program of agricultural liberalization. As a result of this program, barriers to market entry (both domestically as well as for export) were removed and price incentives shifted towards high-value labor intensive crops. At the same time, land prices declined dramatically and there has been a considerable increase in the supply of land on the market. This created favorable conditions for a program of land reform utilizing market transactions together with a government grant, rather than expropriation, to transfer assets to the poor.

2.1 South Africa's rural sector

It is impossible to appreciate the nature of rural poverty and the challenges facing land reform in South Africa without an understanding of the profound nature of discrimination that resulted from the policy of apartheid. In contrast to most other countries that are characterized by unequal distribution of agricultural land, the specific development path followed in South Africa's rural areas virtually eliminated the small farming sector. Instead it established a dualistic structure of highly mechanized white large farms as compared to overcrowded black homelands and dormitory towns (Mbeki, 1984; Morris, 1976).

Following a number of earlier legal interventions with similar goals, the Native Lands Act of 1912 prohibited the establishment of new farming operations, sharecropping, or cash rentals by blacks outside of the reserves, which made up only 7.7% of the country's area. Inside the reserves, an artificial form of "traditional" tenure with maximum holding sizes and restrictions on land transactions was imposed, giving considerable power to collaborative local chiefs. Subsequent policies of "black spot removal" transferred the majority of black farmers who had legitimately owned land outside the reserves into homelands or *bantustans* where tenure restrictions, high population density, and lack of capital and market access made commercial agriculture virtually impossible. An estimated 475,000 people were

relolacted in this manner from “Black Spots” between 1960 and 1983³. Labor laws that discriminated against blacks in favor of white workers and generous capital subsidies to white farmers contributed to successive evictions of large parts of the black population from white farms, where they had been employed as labor tenants and farm workers (Binswanger and Deininger, 1993).

While the Native Lands Act was repealed in 1993, the momentous task of a comprehensive reversal of the other policies and their consequences was left to the government that entered power following the 1994 elections. In attempting to do so, this government had to contend not only with the extremely unequal land distribution (the average amount held per person was 1.3 hectares by blacks compared to 1,570 hectares by whites).⁴ This was exacerbated by the lack of any local government structure, widespread absence of administrative capacity, and the legacy of mis-directed agricultural policies which included subsidies to capital and fertilizer, public sector marketing monopolies, and a legislative environment that undermined the operation of factor markets.

The impact of policy distortions in the agricultural sector can be appreciated from the fact that, instead of the specialization in labor-intensive production of high value crops and agro-exportables that one would expect given the country’s natural endowment, South Africa’s agricultural sector focused on crops (e.g. wheat) not in line with its comparative advantage and with very low potential for employment generation. In the relatively small homeland areas, millions of poor relied on scarce natural resources to complement remittances and pensions from 'outside' as part of a survival strategy. On white commercial farms, by contrast, abundant natural resources were used by a small number of the 'privileged' to produce increasing surpluses. There is agreement that, even though these policies allowed the country to achieve self-sufficiency in food and create a highly technified agricultural sector, the costs – in social as well as economic terms- of doing so have been very high (Wilson and Ramphela 1989).

To reverse this trend and establish a more diverse rural structure, a liberalization program was initiated (Kirsten et al. 1998) to (i) further reform the input and output marketing system; (ii) reduce concentration in the agro-processing sector; (iii) restructure the system of rural financial intermediation; (iv) revise land sub-division legislation and other legal acts that had been established with the express goal of discriminating against the black population; and to (v) upgrade of agricultural support services and invest in an improved physical and social infrastructure in the former homelands. These measures set in motion a serious decline in the profitability of ‘traditional’ crops, an increase in productivity due to a shift to higher value production, and a dramatic increase in the number of indebted farms (van Rooyen et al.

³ The comprehensive reports produced by the Surplus People’s Project have documented this history, see SPP 1983.

⁴ The white-owned, large-scale farm sector accounted for 90 per cent of the value added and owns 86 per cent of the agricultural land.

1998). This created the environment in which a demand-driven approach to land reform would be feasible.

Indeed, there was a significant increase in the number of land sales transactions - more than 6% of all agricultural land changed hands in both 1997 and 1998. Land prices declined by more than 15% between 1994 and 1999 in real terms, and more than 10% of all agricultural land in the commercial farming areas are currently up for sale. Due to increased supply, market values of agricultural land are close to, and in some cases below, the net present value of agricultural profits. Skilled entrepreneurs are able to buy land on the market, financing the purchase price from the proceeds from farming it. Land rental markets, which were small prior to 1994 mushroomed as well; nearly 10% of the total land area were, in 1998, farmed under rental arrangements. Before assessing how this has affected the opportunities for productive development by South Africa's most disadvantaged, we briefly describe general characteristics of rural poverty in the country.

2.2 Rural poverty and livelihoods in South Africa

The apartheid system relied on the existence of a rural population in traditional *bantustans* unable to be self-sufficient and therefore bound to a migrant labor system, but still tied to the land. In this way, rural areas provided residence, services and some income for urban and mine workers' families, to supplement the low wages paid to them. Similarly, outside the bantustans, rural areas are characterized by the existence of an over-capitalized, over-mechanized, job-shedding commercial agriculture sector, a vulnerable farm worker population, and rural dormitory towns that offer few economic opportunities. For *bantustans* bordering commercial farming areas, large numbers of farm workers are threatened with losing both job and housing. Thus, inside and outside the *bantustans*, rural areas entered South Africa's transition with a legacy of squandered assets and inappropriate production and investment strategies. The contraction of the economy and the erosion of the rural economic base through population growth in the absence of productive infrastructure implied that households previously dependent upon a cash income were left with neither the income nor the assets from which they could generate an adequate income. The resulting combination of lack of assets, absence of economic opportunities, and high levels of poverty threatens to persist long after South Africa's political transition.

The extent of rural poverty is confirmed by data from the 1993 SALDRU survey. As Table 1 illustrates, approximately half of South Africa's total population are poor but the poverty headcount in rural areas is 71%, compared to 29% in urban areas (SALDRU 1994). Thus, most of South Africa's poor, about 13.7 million people, live in rural areas. More than three quarters (76%) of the total poverty gap is accounted for by rural households, although they make up only half of the total population. Table 2 shows the poverty gap and the percentage of the population categorized as non-urban by the 1996 census for each

province, illustrating that the spatial distribution of poverty differs across markedly across provinces. Poverty rates are highest in the Northern Province and Free State, although the depth of poverty is highest in the Free State and Eastern Cape.⁵ The poverty gap (i.e. the amount that is needed annually to wipe out poverty through a perfectly targeted transfer to the poor) in 1995 was about R15 billion, or about 4% of GDP. In the case of the Northern Province, the poverty gap amounts to 21% of the Gross Provincial Product.

How has poverty changed since 1993? A 1998 resurvey in KwaZulu Natal of the households included in the SALDRU sample indicates that, in the immediate post-apartheid period, both the depth and the level of poverty increased. This was accompanied by a widening of the income distribution (Carter and May, 1999). While a few households close to the poverty line, endowed with relatively high levels of productive assets, were able to take advantage of the more favorable policy environment and move ahead, a much greater number of households –especially those with low asset endowments- fell behind. This suggests that strategies to increase households' access to productive assets will be a key element of any strategy aimed at sustainable poverty reduction.

3 The land reform program in the context of the RDP strategy

To understand the character of the land reform program, its objectives, and the way in which these were to be implemented, we discuss this program within the overall context of the Reconstruction and Development Program (RDP) launched by the ANC government in 1994. Looking at the key RDP programs jointly allows not only to appreciate the amount of resources involved but also to highlight potential linkages between them.

In 1994, the first democratically elected government of South Africa committed itself to the RDP as policy framework to promote a fundamental transformation of the social, economic and moral foundations of South African society (ANC, 1994; GNU, 1994). Even though a number of institutional and substantive changes were introduced⁶ in the context of the adoption of the Growth, Employment and Redistribution strategy (GEAR), poverty reduction and asset redistribution continued to remain at the

⁵ Comparing different data sets and poverty measures, Leibbrandt and Woolard (1999) have confirmed that this ranking of provinces is robust.

⁶ One important change was that implementation of the RDP shifted from a specialized program office to become a function of line departments. This implied that, instead of a coordinated policy framework that would link the program's different elements together in an attempt to exploit their synergies (as was attempted with the original RDP White Paper), implementation was increasingly guided by sector-specific White Papers, policy documents and legislation. This also implied that monitoring of the different elements became compartmentalized in individual line ministries, focusing more on the achievement of physical targets rather than the degree to which their coordinated activity contributed to achieving overall policy goals.

heart of the government's strategy. The Poverty and Inequality Report prepared for the then Deputy President Thabo Mbeki singles out three programs, land reform, social welfare and housing grants, as standing out as important targeted transfers to the poor (PIR, 1998). Table 2 shows budgeted expenditures (in nominal terms) on each of these programs for the period 1995 to 2002.

The table shows that land reform is the third largest element of South Africa's RDP policies. Resources spent are more modest than in the pension and housing program, amounting to less than 5% of the pension and about 12% of the resources available to the housing program. Studies had shown that demand for residential as well as productive land is considerable (Marcus et al. 1996). Ownership of productive land not only helps to improve nutrition and smooth consumption, to gain access to credit, and to make productive investments. The program's three main elements, tenure reform, restitution, and redistribution are complementary parts of a comprehensive approach to deal with the legacy of apartheid and at the same time establish the basis for development of a diverse rural sector in South Africa. The number of potential beneficiaries to be reached by these three components jointly could well exceed the number of those benefiting from housing and pension programs.

Tenure reform is based on the recognition that a diversified rural economy that provides economic opportunities and well-functioning factor markets requires secure property rights for all South Africans. Given the apartheid regime's attempts to systematically undermine land tenure security, the pent up demand for such a program is tremendous. According to official estimates, the program's target population amounts to almost 6 million rural households, comprised of three main groups, namely (i) some 3.9 million black rural households in former *bantustans* and South African Development Trust (SADT) areas; (ii) roughly 800,000 permanent farm-worker households whose lodging is only as secure as their jobs and who are most affected by the labor-shedding on large farms associated with agricultural liberalization; (iii) about 1.3 million households living in informal and squatter housing in and around urban areas. Some of the complex issues involved in tenure reform are illustrated in Cousins (1995) and in Adams et al. (2000). The government aims to meet about 10%-15% of these demands of people with insecure tenure, or 600,000 to 900,000 households, over the next 5-10 years.

Restitution aims to provide specific compensation to victims of forced "black spot removals" that have been undertaken since 1913. Cases, which had to be lodged before the end of 1998, are dealt with through the Land Claims Court and Commission. Given the complex nature of the cases involved, the legislation aimed to establish a quick administrative rather than judicial process to settle claims. This was not completely successful – of the more than 40,000 cases submitted, less than 1% has been resolved successfully. Furthermore, the need for written documentation of land ownership implies that the

restitution program is heavily biased in favor of urban areas which account for more than 90% of the cases lodged.

A program of *redistributive land reform* was established with the aim of providing opportunities for the large number of black households who wanted to gain access to land but did not have specific documentation to enter the restitution program nor were eligible to benefit from tenure reform. The general principle of the program is to provide a grant, equal to the maximum subsidy under the National housing program (R 16,000 or about US \$ 2,500) that would allow poor households to acquire land plus associated productive infrastructure in the regular market. While this was not expected to be sufficient to establish an independent agricultural operation, it was designed to provide the start-up funds for such an enterprise, to be complemented from other sources. Recognizing the limitations on the first two programs, the Government set very ambitious targets for land redistribution – aiming to transfer 30% of South Africa's 99.07 million hectare farmland, or 29.72 million hectares, between 1994 and 1999. After three years of operation, about 200,000 hectares of land have been transferred to about 20,000 households, representing 0.6% of the target, and 0.2% of the households demanding land.

The second, and quantitatively most important, element of the RDP is the old age pension program. This is an enormous program under which the Department of Welfare pays social grants on a monthly basis to 1.6 million beneficiaries. The payments made under the pension scheme are relatively large, accounting for 22% of rural incomes and 28% of income for the poorest groups. As illustrated in Table 2, the annual cost of this program in 1997/98 (with an exchange rate of about 4 R per US \$) amounted to more than US \$ 1.5 billion. Evaluations, most of them based on the 1993 SALDRU data, suggest that the program provided a significant source of income, on a reliable and non-discriminatory (e.g. gender) basis to remote areas, reaching predominantly the poor and therefore being an effective tool for redistribution (Case and Deaton 1996). Two-thirds of pensions go to rural areas. Given that sixty percent of African households with pensioners are three generation households with children present, pensions may have considerable spillover effects and the pension system could be seen as an effective tool to provide income to households where poor children live. Roughly a third of all children below age of four are in households receiving pensions, and the percentage of children living with pensioners is higher in the poorer quintiles (Stats SA, 1997). It has been shown that pensions that accrue to women (but not to men) significantly reduce stunting of children in the recipient households (Duflo 1999).

The third program is the national housing subsidy scheme, administered through Provincial Housing Boards, which provides a once-off capital subsidy for land, housing and infrastructure to those beneficiaries earning less than R3,500 per month. The subsidy scheme represents a compromise between popular demands for the state to deliver complete houses for all and a concern to spread housing benefits

widely. The maximum lump sum subsidy, available for the very poor, is R16,000. As, in most cases, this is insufficient to cover the costs of a serviced site and a 40 square meter top structure, households have to augment the subsidy with a loan (or from own savings) or embark on an incremental housing process where only a rudimentary shelter can be provided at outset. Between April 1994 and September 1999, the Department of Housing facilitated the construction of some 920,000 housing units, thus spending some 70% of the allocated budget. This notwithstanding, the services provided have, in many cases, not corresponded to beneficiary demand and failed to crowd in the private sector or transform beneficiaries into worthy subjects for the credit market (Tomlinson 1999).

4 Evidence on land reform implementation

In this section we use the survey evidence to examine whether land reform was targeted to the poor; to what degree the data can provide evidence on a potential conflict between attaining equity and efficiency goals; and whether characteristics of successful projects might be used to inform the overall design of the land reform program. We start out with descriptive evidence and then move to econometric analysis. Main results are that (i) the program was well generally targeted; (ii) establishment of economically viable projects did, according to the available evidence, not conflict with the objective of reaching the poor; and (iii) successful projects were characterized by beneficiaries making an own contribution, often taking out credit from other sources, and adopting a more streamlined management and decision-making structure than those that were initially envisaged by the program administration.

4.1 Household characteristics and targeting

The data used are from a survey of 1168 randomly selected beneficiaries in 87 land reform projects that was conducted in September and October of 1999 as part of the first phase of an on-going monitoring and evaluation exercise by DLA. The sample was drawn in two-stages. A first stage selected individual projects with probability proportional to size. In a second stage individual households were randomly selected from a complete beneficiary list drawn up for each of the projects that had been selected in stage one. This resulted in a final sample of 1168 randomly selected beneficiaries plus the associated projects.

Descriptive statistics on beneficiaries are summarized in table 3. One notes that 75% of program beneficiaries fell below the poverty line.⁷ While there was a considerable spread in beneficiary households' level of expenditure, median per capita consumption was less than two thirds of the poverty line and, by that criterion, the most well-off beneficiaries were found in the Western Cape, followed by

⁷ As there is no official poverty line in South Africa, we use the 1993 household subsistence line calculated by the Institute for Planning Research at the University of Port Elizabeth. The figure has been adjusted using an adult equivalence scale, and made comparable to 1999 figures from the survey using the South African Consumer Price Index provided by Statistics South Africa.

the Northern Cape and Gauteng. By comparison, median levels of consumption by reform beneficiaries were lowest in the North West, the North, and in KwaZulu Natal. Food accounted for a large share (about 50%) of land reform beneficiaries' budget, suggesting considerable scope for improving nutrition by relying more on home production from the plot received under the program (not reported).

We also note that land reform households comprised on average of 5.5 members and that the head of the mean household was about 50 years old and had about 3 years of education completed. Levels of participation by female headed households in the land reform program are high, contrary to concerns that the land reform program may be biased against women. In the aggregate, 31% of land reform households were female headed and in some provinces, such as Gauteng and Northern Province, 50% or more of beneficiary households are headed by females. One also notes that households who participated in the land reform program are endowed with significant levels of un- or underutilized labor - the mean number of unemployed adults in reform beneficiary households is 1.1. In more than 20%, the household head is unemployed. This could suggest that there is significant potential for improving household nutrition and welfare from own production.

Indicators of infrastructure access support the hypothesis that land reform targeted poor individuals in remote areas and with bad housing. More than 70% of beneficiaries were located in areas with bad roads, and almost half with roads that were permanently or regularly impassable. 55% lacked running water and two thirds had either no toilet or a pit latrine. With such relatively low levels of infrastructure access, it is surprising to find that a significant share had access to electricity. Note, however, that there is large regional variation in this variable -which ranges from more than 80% in the Free State to less than 5% in the Northwest.

Another interesting finding from the descriptive statistics is that a large percentage of beneficiaries (50%) have access to savings and about 25% have access to credit. This might indicate that the program selects households with a more entrepreneurial attitude and that options to link the land reform grant more closely to formal savings and longer-term credit might be worth pursuing. The hypothesis that the program results in the self-selection of more entrepreneurial households is supported by the higher levels of ownership of farm animals among land reform beneficiaries, even if compared only to the rural population. Almost 60% of land reform beneficiaries own poultry, 44% own goats, 37% own pigs, and 27% own cattle, with inter-provincial differences in line with agro-climatic conditions (not reported).

Also, of the land reform beneficiaries, 32% had access to pensions, and 6% reported to have earlier accessed the housing grant.⁸

To put the characteristics of land reform beneficiaries in perspective, it would be desirable to compare them to those of the country as a whole. For the variables that are available in both surveys, such a comparison can be undertaken using the SALDRU survey. In doing so one has to bear in mind that, with limitations in variable coverage⁹ and an absence of reliable recall data, the ability to make systematic inferences on beneficiaries pre-project status is limited essentially to infrastructure access. Nonetheless, probit regression for land reform participation performed on the combined sample of land reform beneficiaries and the rural non-white part of the 1993 SALDRU survey¹⁰ suggest that, even within this group, the program was well targeted. The fact that land reform beneficiaries had systematically worse infrastructure access than non-beneficiaries within the target group clearly allows to reject the hypothesis that program benefits are appropriated by non-poor or non-eligible beneficiaries.

Detailed results are presented in table 4. As illustrated in equation (1), land reform beneficiaries' access to social infrastructure is significantly below that of even the remainder of the rural non-white population. Limited access to water and bad roads stand out. Similarly, they are far more distant from good roads than the population average and much more likely to have no toilet. In addition, they have more people in higher age and a lower dependency ratio, with the number of persons aged between 14 and 60 being marginally significant. While the head's age is highly significant, education is not. The high significance of provincial dummies points towards large differences across provinces in the extent of land reform implementation. Adding household assets (in equation 2) indicates that, as noted earlier, land reform beneficiaries are more likely to have access to farm animals (cattle and poultry) as well as electricity, as noted from the descriptive analysis.

All of this suggests that, contrary to land reform programs in other countries such as Brazil which seem to reach the relatively better off within the poor (Buinainain et al. 1999), mis-targeting is not an issue in South Africa. This leads to the issue of land reform projects' economic viability and the characteristics of economically successful ventures.

⁸ The data do not allow to determine whether this actually reflected that beneficiaries had accessed the grant twice or, as is more likely, they had confused the land purchase grant with the housing grant and interviewers were not sufficiently alert to seek further clarification on this.

⁹ For example, the SALDRU survey does not contain information on whether or not the household benefited from other government programs.

¹⁰ As both the white rural or the non-white urban population are far better off than non-white people, their inclusion obviously would greatly strengthen the results reported here. In view of the fact that the target group is restricted to the non-white population, we refrain from doing so, noting that the above results imply that the program is well-targeted to the poor even within this group.

4.2 Characteristics of successful projects

To make inferences about the projects implemented under the program, we compute gross annual revenue from agricultural production, i.e. incomes minus expenditures on variable inputs, obtained by beneficiary groups at the project level. This provides an indication of the returns to fixed factors of production (land, labor, and management) from the land reform project. As illustrated in the bottom part of table 3, the mean annual revenue per beneficiary amounts to R 6,212 with considerable variance. In KwaZulu Natal, the Northwest, and the Northern Cape, revenues are virtually zero. By contrast, mean revenue is high in Northern Province and the Western Cape.

Indeed, our data point to clear differences in the way the program was implemented, suggesting that more detailed study of the models adopted in successful provinces could lead to interesting insights. One variable of interest in this context is the number of household included in the land reform project. The project size, which is about 25 at the national average, varies between 8 households in the Western Cape and the Free State, and 81 and 95 in Northern Province and the Eastern Cape, respectively. Furthermore, land received under the land reform program is supposed to be operated collectively in 71% of the projects, a variable that shows even larger inter-provincial variation. The percentage of collective projects ranges from almost 100% in the Free State and Mpumalanga to about one third in the Northern and Western Cape and in KwaZulu Natal. However, to interpret this figure, one has to note that, of the projects that were officially approved and therefore included in the survey, only about half reported to actually have been able to take possession of the land. The share of projects where land was actually transferred to beneficiaries ranges between less than 20% in the Eastern Cape and almost 80% in the Northwest of the country, pointing to considerable differences in which the program operates across regions.

The variation in implementation is matched by differences in other project characteristics and the socio-economic environment into which the projects are being implemented. To obtain access to the government grant, beneficiaries have to form a legal entity with its own internal by-laws and regulations. Survey evidence indicating that less than two thirds (64.4%) of the community leaders in approved projects were aware of the contents of these regulations. This implies that in more than a third of projects there is a basic lack of awareness of the broader goals of their project, let alone a clear definition of decision-making structures to help in day-to day management. Greater emphasis on capacity building to improve beneficiaries' awareness of the program and its rules, and clarification that collective management is not required, appear to be called for. Given the large variation across provinces –virtually all of the community leaders know the constitution in the Free State but less than 40% in Mpumalanga– much might be gained by improved sharing experience across provinces.

One of the options available to beneficiaries as a group is to require individual households to make regular cash contributions which towards the provision of public goods such as marketing, training, purchase of machinery, etc. The data show that such contributions are being made in slightly more than one third of the projects. The three provinces where the share of beneficiaries making a contribution is lowest (KwaZulu Natal, Northern Cape, and Northwest with 11%, 11%, and 22%, respectively) are also those where virtually none of the projects was economically viable. Even though this does, of course, not imply any causality, pursuing the possibility of a link between these two variables might be of interest. In addition to the factors discussed above, we find that land reform projects are implemented in environments where theft, land invasions, and violence are widespread (with 61%, 36%, and 28%, respectively).

In view of the high variability of project outcomes, and to derive policy conclusions, we explore commonalities between economically successful projects. Doing so is of interest for two main reasons. On the one hand, it allows us to address the concern that viable projects might have excluded the poor and/or are successful only because they were able to “pick” the most able (educated, wealthy, entrepreneurial) beneficiaries. If true, this would raise doubts about the scope of land reform in South Africa to reconcile equity and efficiency objectives and to serve as a broadly replicable tool for poverty reduction. On the other hand, finding indicators, either at the project or at the beneficiary level, which seem to be strongly correlated with good performance could be of considerable interest for program design. Using these systematically could help in streamlining the program and defining eligibility criteria for approval of individual projects.

As a first step, we group the land reform projects included in the survey by the amount of total revenue per beneficiary household into two groups, one with no or negligible and one with sustainable revenues.¹¹ Using this criterion, 14 projects (or about 16% of the total) are classified as having “sustainable revenues” with the rest falling into the other category. As table 5 illustrates, projects in the former category generate a median annual revenue of R 10,000 per beneficiary, sufficient to lift beneficiaries out of poverty. On the other hand, even accounting for the fact that most of the projects are still in the early stages of implementation and that revenues might reasonably be expected to increase over time, the large number of non-viable projects points towards the scope (and need) for considerable improvement. Ability to show that successful projects benefited the poor would thus be doubly valuable, not only to indicate that, despite the slow start, the program has potential to benefit the poor but also (and probably more

¹¹ The purpose of this exercise is not to establish causality but rather to make the point that use of certain criteria to select beneficiaries is likely to be associated with better project quality without compromising the program’s poverty goals.

importantly) that, even though not all are economically viable, the overall orientation is at least on the right track.

Table 5, which presents the results of this comparison, allows us to clearly reject the hypothesis that projects in the “high” revenue category were doing well because they were captured by a narrow minority of well-educated, wealthy, and experienced beneficiaries. To the contrary, land reform projects in this group included a larger number of poor (81.4% as compared to 73.7%) than the low revenue category. Moreover, beneficiaries had significantly lower per capita spending (R 260 as compared to R 346), housing quality (85% as compared to 63% had no toilet or a pit latrine), and asset ownership (9% as compared to 21% had a telephone) in the former as compared to the latter. Participants in the high revenue group were also significantly less likely to have simultaneously accessed the housing subsidy (1.6% as compared to 7%) and had significantly lower endowments of education (average years of education by the household head was 2.81 as compared to 3.15 years). Finally, in the high revenue group, a higher percentage (35% as compared to 30%) was female headed, although the difference is not statistically significant. All available indications seem, thus, to suggest that there was no conflict between targeting land reform to the poor and aiming to establish projects that provided a minimum level of economic viability.¹² Given that projects established by beneficiaries with lower endowments were also more successful economically, there may be considerable potential for improving the poverty-reducing impact of land reform by focusing on both of these aspects jointly.

To make this useful for program design, we aim to explore in more detail characteristics associated with better performance at the project level. Three attributes in this category stand out, namely (i) beneficiaries’ willingness to make a cash contribution towards the project; (ii) the size and management of the project as indicated by the number of participating households and the type of community organization; and (iii) private sector involvement in project monitoring as indicated by the fact that projects received a loan from a third party.

The data show that projects whose beneficiaries make a regular cash contribution are more likely to belong to the top group and have significantly higher revenues than those where this is not the case. This is of particular interest in view of the earlier result that having an own contribution by beneficiaries (which can be modest) does not discriminate against the poor. It is also in line with experience from other countries where the willingness to spend time and money on activities associated with project preparation has emerged as an important criterion to signal beneficiary interest. In terms of program design, this

¹² This is in line with findings from Zimbabwe where, over a much longer time horizon, beneficiaries’ initial endowment with assets and human capital were found to be unrelated to their productive success (Gunning et al. 1999).

would suggest that replacing the 100% grant element with a combination of grant and own contribution would enhance not only beneficiaries' sense of "ownership" but also the probability of a projects' economic success.

A second point of interest is that successful and unsuccessful projects also show clear differences in size and management structure. "Low revenue" projects comprise almost 30 households on average, compared to an average of less than 10 households for successful ones. In addition, 90% of unsuccessful projects are run by a trust or a common property association, a legal figure developed specifically for the land reform program, whereas a significant share of successful projects is based on different arrangements. This is in line with the notion that limitations currently imposed by the need to form rigid legal entities, the purpose of which is often neither understood by beneficiaries nor by many of DLA's staff, may be detrimental to projects' economic success. It may be prudent to allow beneficiaries to adopt management structures more suited to their specific needs. This should include an option for individualization of production and adopt joint arrangements only for marketing and other aspects where there are clear economies of scale.

The case of "share equity schemes", a type of projects that has emerged a response to the high prices of land (including standing crops and the processing and marketing infrastructure) in labor-intensive high value crops such as wine, fruit trees, and other perennials, illustrates this point. In these crops, the land acquisition grant is not sufficient to give poor people access to a plot of land that can provide a basis for their sustenance. To overcome this, beneficiaries –in many cases former farm workers- have formed joint ventures (often involving leasing arrangements rather than straight purchase of land) with the landlord, an outside manager, and/or a third party investor (Eckert et al 1996).

Clearly, not all of these ventures are a success and capacity building and legal advice are needed to protect beneficiaries from being abused by bankrupt white farmers whose only interest is to obtain public resources to clean up their balance sheets. Nonetheless, they illustrate the scope for inventive adaptation by local communities and suggest that innovative forms of land access, which might involve leases with the option to buy, phased land acquisition, or the establishment of joint ventures, could have much potential and will be likely to form part of the emerging land reform picture in South Africa.

Other innovations in the same spirit that have emerged include the establishment of a link between the land reform grant and prior saving, credit schemes that are adapted to the cash flow to be generated by the project, and other NGO- and private sector-led initiatives (Lyne et al. 1998). All of this suggests that greater popular participation could pave the way for a significant increase in the pace of land reform delivery and at the same time reduce the program's current dependence on the capacity and constraints of the government bureaucracy.

The case for increasing the flexibility of the program is also supported by evidence from KwaZulu Natal where recent research shows that land transactions outside the government program have, between 1996 and 1998, transferred more land from formerly advantaged to disadvantaged households than did government schemes (Graham and Lyne 1999).¹³ This illustrates the economic potential of land reform – the private land purchasers are able to use the returns generated to pay off a loan and sustain their family – as well as the fact that the land reform program in its present form may be less responsive to beneficiaries’ needs and desires than would be hoped.

Finally, “high revenue” projects are found to also be significantly more likely to have obtained a group loan to complement public grant resources. This suggests that many land reform beneficiaries are able to combine the land reform grant with other sources of credit.¹⁴ It may illustrate the scope for private sector lenders to complement – and eventually substitute for – costly and bureaucratic efforts to “pick winners” and assess projects’ viability *ex ante* that are currently carried out by government. Receipt of a loan is likely to indicate examination and continued outside monitoring of the project by the private sector and might, at least in the long term, offer to replace present procedures, which are often ad-hoc and bureaucratic, with more transparent, predictable, and quick approval processes.

5 Conclusion and policy implications

In contrast to most past discussions of redistributive land reform, this paper has provided empirical evidence on actual implementation. Although many of the projects are still in the early stages of implementation, the data suggest that land reform was able to target the poor. Moreover, the fact that economically successful projects reached significantly higher levels of poor people suggests that increased access to productive assets could be an important avenue for poverty reduction. Given the importance of developing a diverse and less subsidy-dependent rural sector, a suitably adapted land reform could play an important role in the restructuring of South Africa’s rural sector.

At the same time, the limited progress under the current program suggests that much of this potential is, as of yet, unrealized. Our analysis points towards a number of clear lessons with respect to program design, as discussed earlier. Probably the most important conclusion is to increase beneficiary awareness and participation. Doing so would include shifting from a bureaucratic and centralized approval structure specifically designed for land distribution towards a more integrated vision that takes account of other

¹³ It would be very interesting to use the sample of private land transactions for case studies to illustrate specific factors that could act as barriers to entry into the land market – and ways in which institutions and capacity building efforts may be aligned to reduce their impact.

¹⁴ Even though some of these credits may have been designed to complement government programs, the private sector takes some risk and therefore performs an important monitoring function in all of them.

program components and puts them into the context of broader rural development goals. This would not only strengthen links to the broader land reform program (in particular tenure reform) and to better utilize synergies at the local level (i.e. including complementary infrastructure such as housing, material for minor infrastructure works, etc.) and encourage, rather than stifle, local initiative and decentralized implementation mechanisms.

Although these results are based on evidence from the specific context of South Africa, they hold lessons for other countries where discussion of redistributive land reform is currently on the policy agenda, in Africa and beyond. In Zimbabwe, discussions on land redistribution have generated attention and concern among donors and investors alike. Integration of land redistribution into a land policy framework that guarantees existing property rights and aims to increase tenure security for residents of communal areas has emerged as an issue of critical importance. At the same time it is realized that private sector participation, transparency, and accountability at the local level will be critical to dispel fears that land reform is just another means of political favoritism, rather than an instrument to transform the rural sector (Government of Zimbabwe, 1998). In Brazil “negotiated” land redistribution that is based on beneficiary initiative and active involvement of the private sector has advanced very rapidly. In addition to having private financial intermediaries carry a real credit risk, greater involvement of civil society at large to ensure that the program is not driven by landlords, as well as a stronger focus on capacity building at the community level, seem necessary to ensure that the program will be sustainable in the long term (Bunainain et al 1999). Finally, in the Philippines, where adoption of a “community-based” approach to land reform is currently debated, past land reform attempts have, by undermining the functioning of the land rental market, precluded access to land by many poor and landless households. Linking the elimination of these barriers to greater local participation, and in particular effective collection of land taxes is likely to provide far greater benefits to the poor than what has been possible through a program of purely redistributive land reform (Deininger et al. 1999).

All of the above evidence suggests that there is plenty of scope for an increased role for beneficiaries, local government units, communities, and the private sector to improve implementation of the land reform program. While the experience thus far has been important to demonstrate the potential of redistributive land reform to improve equity as well as efficiency, scaling up of the program – and its integration into the broader context of land reform in South Africa will require that government perform more of a facilitating role. The challenge is to move towards a land reform process that puts the program into a broader context, and aim to empower the poor, improve productivity, and create sustainable rural livelihoods, rather than just redistribute hectares of land. South Africa certainly offers considerable potential for implementation of land redistribution within the broader land reform program. Being aware

of the obstacles to making this effective is probably the best way to ensure that land reform will contribute to advancing both equity and efficiency.

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Table 1a: Poverty, Inequality and Unemployment in South Africa 1995

Indicator	Share Pct	Number of people
Poverty Rate Total	49.9	19 700,000
Poverty rate in non-urban areas	70.9	13 700,000
Poverty rate in urban areas	28.5	6,000,000
Poverty share of non-urban areas	71.6	
African poverty rate	60.7	18 300,000
White poverty rate	1	44,000
Unemployment Rate	29.3	4 250,000
Income share of poorest 40% of households	11	
National Gini coefficient	0.52	

Table 1b: Provincial Distribution of Poverty 1995

Province	Population	% Hhds living in poverty	% Ind. Living in poverty	Poverty gap R million	Poverty Gap as a % of GGP	% of Population Non-Urban
Eastern Cape	6,302,526	40.4	50.0	3303	11.4	63.4
Free State	6,633,504	56.8	64.0	3716	15.7	31.4
Gauteng	7,348,423	29.7	41.0	917	0.6	3.0
KwaZulu-Natal	8,417,021	36.1	47.1	1159	2.0	56.9
Mpumulanga	2,800,712	33.8	45.1	968	3.1	60.9
North West	3,354,825	15.4	21.1	1551	7.3	65.1
Northern Cape	840,321	38.2	48.0	257	3.2	29.9
Northern Province	4,929,368	61.9	69.3	2948	21.4	89.0
Western Cape	3,956,874	14.1	17.9	529	1.0	11.1
South Africa	40,583,574	35.2	45.7	15348	4.0	46.3

Table 2: Expenditures on the three key RDP Programs R Million

Year	Pensions	Housing	Land Reform
95/96	5,417	821	25
96/97	6,049	1,453	104
97/98	6,717	2,635	197
98/99	7,382	3,019	407
99/00	6,247	2,971	388
00/01	6,564	2,905	499
01/02	6,833	3,417	517
Total	45,209	17,222	2,137

Source: Derived from National Expenditure Survey and MTEF

Table 3: Profile of land reform projects and beneficiaries

	National	Eastern Cape	Free State	Gauteng	KwaZulu Natal	Mpumalanga	Northern Cape	Northern Province	Northwest	Western Cape
Household level information										
Poor	74.9%	77.9%	73.4%	74.6%	79.7%	83.1%	66.7%	71.8%	83.3%	66.8
Per capita expenditure median	221.08	209.19	237.51	248.28	177.91	191.14	263.50	180.39	120.73	310.66
No. of household members	5.47	4.68	4.64	4.14	7.61	6.35	4.54	5.97	5.03	4.81
Head's age years	50.45	48.41	51.41	44.96	52.14	52.47	51.07	54.37	50.67	45.53
Head's education years	3.09	3.58	3.38	4.69	1.87	2.75	3.65	2.73	2.45	3.48
Female headed	30.8%	28.4%	21.2%	50.0%	25.9%	28.8%	35.4%	56.5%	30.2%	20.0%
Access to housing subsidy	6.2%	2.7%	3.9%	6.8%	4.8%	2.1%	11.6%	0.0%	0.0%	21.3%
Receive pension	32.4%	22.3%	23.9%	14.0%	38.8%	35.4%	32.0%	53.5%	42.9%	23.5%
Have savings account	50.1%	44.2%	55.3%	47.5%	48.3%	38.7%	51.4%	37.0%	41.3%	82.6%
Access to credit	24.1%	37.5%	35.3%	10.3%	24.3%	12.0%	20.5%	10.2%	27.0%	35.5%
Access to electricity	42.2%	35.4%	82.5%	42.4%	10.8%	42.1%	38.8%	24.1%	4.5%	71.8%
No running water	54.9%	69.9%	21.4%	52.5%	85.8%	67.2%	51.0%	73.6%	87.9%	2.8%
Roads bad	72.5%	59.3%	53.9%	83.1%	94.6%	80.5%	65.3%	86.4%	74.2%	66.9%
Roads impassable most of the time	44.6%	46.0%	28.6%	23.7%	49.3%	50.3%	93.2%	50.9%	13.6%	16.2%
Pit latrine or no toilet	66.2%	92.0%	57.1%	45.8%	86.5%	90.8%	56.5%	95.5%	28.8%	16.9%
No permanent housing	54.1%	51.3%	48.7%	74.6%	82.4%	57.9%	45.6%	42.7%	74.2%	26.8%
No of individuals	1160	113	154	59	148	195	147	110	66	142
Project level information										
Mean revenue per beneficiary	6212.7	1630.0	2222.5	1484.5	-3.3	5355.6	181.8	18043.3	5.4	15432.7
Number of people on the legal entity	24.5	94.9	7.8	12.0	10.3	12.0	10.6	80.8	13.5	7.6
Share of land communally operated	71.3%	72.8%	97.8%	45.7%	37.1%	95.9%	34.4%	64.8%	86.3%	37.6%
Share of projects who received land	50.5%	19.5%	60.4%	40.7%	34.5%	73.8%	39.5%	67.3%	77.3%	39.4%
Know community constitution	64.4%	44.2%	98.1%	45.8%	58.1%	39.5%	84.4%	71.8%	74.2%	62.7%
Make contribution to project	35.4%	48.7%	77.3%	44.1%	10.8%	26.7%	10.9%	50.0%	22.7%	34.5%
Committee works harmoniously	71.3%	87.5%	46.7%	60.0%	84.6%	76.9%	63.6%	100.0%	50.0%	66.7%
Violence is a problem	27.6%	12.5%	20.0%	60.0%	61.5%	15.4%	36.4%	11.1%	50.0%	22.2%
Land invasions are a problem	35.6%	25.0%	26.7%	40.0%	84.6%	46.2%	27.3%	11.1%	50.0%	22.2%
Theft is a problem	60.9%	37.5%	66.7%	40.0%	100.0%	69.2%	54.5%	66.7%	100.0%	55.5%
No of projects	87	8	15	5	13	13	11	9	4	9

Source: DLA Land Reform Beneficiary Survey

Table 4: Probit regressions for land reform participation

	Mean of variables	Regressions	
		(1)	(2)
Number of rooms	3.90	-0.003 (1.47)	-0.005* (2.06)
No access to running water	9.0%	0.647** (21.89)	0.662** (21.17)
No toilet	62.2%	0.034* (2.06)	0.055** (3.26)
Roads passable most of the time	33.0%	-0.052** (3.33)	-0.056** (3.63)
Roads passable all of the time	40.0%	-0.291** (14.94)	-0.282** (14.52)
Head's education	2.96	0.003 (1.16)	0.001 (0.33)
Head's age	50.29	0.008* (2.24)	0.007* (2.30)
Head's age squared	2783.10	0.000** (2.82)	0.000** (2.91)
Female head	32.7%	0.006 (0.40)	0.035* (2.22)
Number of persons younger than 14	2.02	-0.028** (6.74)	-0.026** (6.21)
No. of persons age 14-60	3.35	0.007+ (1.72)	0.002 (0.52)
No. of persons age more than 60	0.43	0.085** (6.28)	0.074** (5.42)
Free State	7.8%	0.443** (12.05)	0.420** (10.59)
Gauteng	1.2%	0.815** (11.19)	0.828** (10.61)
KwaZulu	19.2%	-0.079** (3.58)	-0.091** (3.73)
Mpumalanga	13.8%	0.188** (6.58)	0.169** (5.32)
Northern Cape	2.9%	0.813** (14.76)	0.828** (14.13)
Northern Province	18.2%	-0.019 (0.76)	-0.003 (0.13)
Northwestern Province	14.8%	-0.028 (0.96)	0.013 (0.40)
Western Cape	3.5%	0.790** (17.73)	0.788** (16.07)
Household has electricity	28.9%		0.147** (7.73)
Household owns cattle	17.5%		0.145** (6.14)
Household owns sheep or goat	16.4%		0.005 (0.22)
Household owns poultry	28.3%		0.054** (2.64)
Household owns pigs	8.5%		0.015 (0.54)
Pseudo R ²		0.4645	0.4914
Log-likelihood		-1285.73	-1220.33
No. of observations	4256	4256	4255

Absolute value of robust z-statistics in parentheses

* significant at 5%; ** significant at 1%; + significant at 10%

Source: Land reform M&E survey plus SALDRU sample for non-whites in rural areas only.

Table 5: Characteristics of successful and unsuccessful projects

	Low revenue	High revenue
Community level variables		
Number of people on legal entity	27.56	9.14
Revenue per person median	-9.0	10552.1
Community has taken a loan	9.6%	42.9%
Trust or CPA are main decision-makers	90.0%	66.7%
Manager is main decision-maker	3.3%	25.0%
Individual characteristics		
Per capita expenditure mean	346.22	259.93
Per capita expenditure median	228.73	189.90
Share of poor beneficiaries	73.7%	81.4%
No. of household members	5.45	5.57
Head's age	50.21	51.70
Head's education	3.15	2.81
Female headed	30.1%	34.6%
Household accessed housing subsidy	7.0%	1.6%
Household owns cattle	25.9%	32.4%
Household owns car	16.5%	11.9%
Household owns telephone	21.5%	9.1%
Household has access to electricity	42.3%	41.6%
Household has no running water	56.1%	48.9%
Roads are bad	72.1%	74.5%
Roads are impassable most of the time	45.0%	42.6%
Household has pit latrine or no toilet	62.6%	85.1%
Household does not live in a permanent building	53.6%	56.9%
Household makes cash contribution to project	32.0%	53.5%

Source: DLA Land Reform Beneficiary Survey

Note: **Bold** coefficients are significantly different at 10% and those in ***bold italics*** at 5% or higher.

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